

Listing of Claims:

Please amend the claims as follows. This Listing of Claims will replace all prior versions and listings of claims in the application.

CLAIMS

1. – 63. (Canceled).

64. (Currently Amended) An electroluminescent device comprising
(i) a first electrode;
(ii) a second electrode; and,
(iii) between the first and second electrodes a layer of an
electroluminescent composition consisting of a metal quinolate in which the metal has a
valency of greater than 3 selected from zirconium quinolate and hafnium quinolate doped
with 10^{-3} to 10 mole% of a fluorescent dopant selected from the group consisting of
diphenylacridine, coumarins, perylene, quinolates, porphyrins, porphines, and pyrazalones,
wherein said device has the characteristics of a higher luminance
efficiency measurable as cd A^{-1} , a greater luminance measurable as cd m^{-2} at 20 mA cm^{-2} ,
and a reduced turn-on voltage compared with a similar device in which said metal quinolate
is aluminum quinolate.

65. (Currently Amended) The device of claim 64, wherein the dopant metal
quinolate is hafnium quinolate selected from the group consisting of diphenylacridine,
coumarins, perylene, quinolates, porphyrins, porphines, and pyrazalones and their derivatives.

66. (Previously Presented) The device of claim 64, further comprising a layer of a hole transmitting material between the first electrode and the layer of the electroluminescent composition, and also comprising a layer of an electron transmitting material between the second electrode and the layer of the electroluminescent composition.

67. (Previously Presented) The device of claim 66, wherein the hole transmitting layer is an aromatic amine

68. (Currently Amended) The device of claim 67, wherein the aromatic amine is N,N'-diphenyl-N,N'-bis (3-methylphenyl) -1,1' -biphenyl -4,4'-diamine (TPD) or α -NPB.

69. (Previously Presented) The device of claim 66, wherein the electron transmitting material comprises a metal quinolate.

70. (Previously Presented) The device of claim 66, wherein the electron transmitting layer comprises lithium quinolate.

71. (Previously Presented) The device of claim 66, wherein the electron transmitting layer comprises aluminum quinolate.

73. (Previously Presented) The device of claim 64, wherein the first electrode acts as an anode and is formed of a transparent electrically conducting material selected from glass and plastic.

74. (Previously Presented) The device of claim 73, wherein the second electrode acts as a cathode and is formed of a material selected from aluminum, calcium, lithium, magnesium, magnesium alloys and silver/magnesium alloys.

75. (Currently Amended) A method for fabricating an electroluminescent device comprising a layer of an electroluminescent composition between first and second electrodes and for substantially increasing the luminescence efficiency measurable as cd A^{-1} , substantially increasing luminance measurable as cd m^{-2} at 20 mA cm^{-2} , and substantially reducing the turn-on voltage of said electroluminescent device relative to an aluminum quinolate-based device,

said method comprising the step of fabricating said layer of an electroluminescent composition from a material consisting of a metal quinolate in which the metal has a valency of greater than 3 selected from zirconium quinolate and hafnium quinolate doped with 10^{-3} to 10 mole% of a fluorescent dopant selected from the group consisting of diphenylacridine, coumarins, perylene, quinolates, porphyrins, porphines, and pyrazalones.

76. (Currently Amended) The method of claim 75 comprising the step of fabricating said layer of an electroluminescent composition from a material consisting of ~~zirconium~~ hafnium quinolate doped with 10^{-3} to 10 mole% of a the fluorescent dopant.

77. (Currently Amended) The method of claim 75, wherein the metal quinolate is hafnium quinolate and the dopant is diphenylquinacridine (DPQA) selected from the group consisting of diphenylacridine, coumarins, perylene, quinolates, porphyrins, porphines, and pyrazolones and their derivatives.

78. (Currently Amended) The method device of claim 75 91, further wherein the electroluminescent device comprises a layer of a hole transmitting material between the first electrode and the layer of the electroluminescent composition, and also comprising a layer of an electron transmitting material between the second electrode and the layer of the electroluminescent composition.

79. (Currently Amended) The method device of claim 78, wherein the hole transmitting layer is an aromatic amine.

80. (Currently Amended) The method device of claim 79, wherein the aromatic amine is N,N'-diphenyl-N,N'-bis (3-methylphenyl) -1,1' -biphenyl -4,4'-diamine (TPD) or ~~α-NBP~~ α-NPB.

81. (Currently Amended) The ~~method~~ device of claim 78, wherein the electron transmitting material comprises a metal quinolate.

82. (Currently Amended) The ~~method~~ device of claim 78, wherein the electron transmitting layer comprises lithium quinolate.

83. (Currently Amended) The ~~method~~ device of claim 78, wherein the electron transmitting layer comprises aluminum quinolate.

84. (Currently Amended) The ~~method~~ device of claim 78, wherein the electron transmitting layer comprises zirconium quinolate.

85. (Currently Amended) The ~~method~~ device of claim 76 91, wherein the first electrode acts as an anode and is formed of a transparent electrically conducting material selected from glass and plastic.

86. (Currently Amended) The ~~method~~ device of claim 85, wherein the second electrode acts as a cathode and is formed of a material selected from aluminum, calcium, lithium, magnesium, magnesium alloys and silver/magnesium alloys.

87. (Currently Amended) An electroluminescent device according to Claim 64 prepared by a method including a step of fabricating said layer of an electroluminescent

composition from a material consisting of zirconium quinolate or hafnium quinolate doped with 10^{-3} to 10 mole% of a the fluorescent dopant.

88. (Currently Amended) The device of claim 87, wherein the dopant is diphenylquinacridine (DPQA) selected from the group consisting of diphenylacridine, coumarins, perylene, quinolates, porphyrins, porphines, and pyrazalones and their derivatives.

89. (Currently Amended) The device of claim 87 88, further comprising a layer of a hole transmitting material between the first electrode and the layer of the electroluminescent composition, and also comprising a layer of an electron transmitting material between the second electrode and the layer of the electroluminescent composition.

90. (Previously Presented) The device of claim 89, wherein the electron transmitting layer comprises zirconium quinolate.

91. (New) An electroluminescent device comprising
(i) a first electrode;
(ii) a second electrode; and,
(iii) between the first and second electrodes a layer of an electroluminescent composition consisting of zirconium quinolate doped with 10^{-3} to 10 mole% of diphenylquinacridine (DPQA) as a fluorescent dopant,
wherein said device has the characteristics of a higher luminance

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efficiency measurable as cd A⁻¹, a greater luminance measurable as cd m⁻² at 20 mA cm⁻², and a reduced turn-on voltage compared with a similar device in which said metal quinolate is aluminum quinolate.

92. (New) The device of Claim 91 comprising in sequence the following layers:
ITO (100Ω/sq. m); CuPc (15nm); α-NPB (75nm); Zrq₄:DPQA (75:0.75nm); LiF (0.4nm); and Al,

wherein: ITO is indium tin oxide coated glass; CuPc is copper phthalocyanine; α-NPB is an amine complex; Zrq₄ is zirconium quinolate; DPQA is diphenylquinacridine; LiF is lithium fluoride; and Al is aluminum.